VETERINARY SERVICES NOTICE

April 3, 1992

Subject: Testing Cervidae for Tuberculosis - Recommended Guidelines

To: Directors, VS Regions
Area Veterinarian in Charge, VS
Director, NVSL
Veterinary Medical Officers

This notice establishes new recommended standards for conducting tuberculin testing of Cervidae and for handling animals that respond to the tests. The standards are for guidance only since Cervidae are not included in the current tuberculosis eradication program. This notice also states the possible applications and limitations of the blood tuberculosis test (BTB) in the testing procedure. Finally, a procedure is given whereby accredited veterinarians in private practice may conduct the single strength cervical test (SSCT) in Cervidae of unknown tuberculosis status.

Veterinary Services Notice, Tuberculin Testing in Cervidae, dated December 31, 1990, is hereby canceled.

The standard procedure remains basically unchanged except for the time periods during which the comparative cervical test may be applied on cervids responding to the SSCT which are classified as SUSPECT. Also, the modifications include use of the BTB test as recommended by the International Conference on Bovine Tuberculosis in Cervidae held in Denver, Colorado, July 1991, and modified according to experience gained in its use during 1991.

The SSCT is the initial test for deer, elk, and other species of the family Cervidae. The SSCT is the intradermic injection of 0.1 ml. of U.S. Department of Agriculture (USDA) contract PPD Bovis tuberculin in the midcervical region with reading by observation and palpation at 72 hours, plus or minus 6 hours.

At the injection site, an area measuring approximately 3 1/2 inches square, must be clipped using electric clippers with a fine blade and be carefully checked for extraneous reactions from prior injuries or drug administrations. The injection is made in the center of the clipped area and if properly done should result in a distinct bleb at the injection site. Reading of the SSCT is by palpation and observation. This requires that the skin be grasped so as to cause a fold over the injection site and then carefully palpating by running the thumb and fingers of the opposite hand back and forth along the fold. Palpation which is limited to running the fingertips over the skin surface is not acceptable.

Any response, irrespective of size, detected by palpation or visually will be considered a suspicious test and the responding animal will be classified as SUSPECT. If there is reason to suspect the animal or herd had been exposed to Mycobacterium bovis, such responses shall be classified as POSITIVE. All responses must be reported. The response size shall be recorded in millimeters (estimated) of increased skin thickness on VS Form 6-22, Tuberculosis Test Record, or other official form. The official USDA metal eartag is the only acceptable form of identification, except that animals bearing official eartags of other countries need not be retagged.

SUSPECT animals may be handled in one of two ways as follows:

1. SUSPECT animals may be held for a comparative cervical tuberculin test (CCT) which must be applied within 10 days following the SSCT injection or after 90 days following the SSCT. (Example: If the SSCT injection is made on January 1, the CCT injection can be made through January 11.) The CCT is conducted exactly as in cattle, but with the following stipulations: CCT injections must be made on the side of the neck

opposite from the SSCT site. All animals having equal sized avian and bovine responses or larger bovine responses shall be classified as POSITIVE. Veterinary Medical Officers (VMO), State or Federal, must be specifically approved to conduct the CCT.

The BTB may be applied in SUSPECT animals in conjunction with the CCT in States acknowledging the BTB. In no case should the BTB be used alone to clarify the status of suspects. Also, the chief State animal health official must be provided with a copy of the laboratory report giving the full quantitative data upon which the animal classifications are based. Owners wishing to utilize the BTB will be responsible for all procedural expenses incurred. Suspects positive to the CCT and/or the BTB shall be classified as POSITIVE.

OR

2. They may be sacrificed at owner's expense and receive a complete necropsy by, or in the presence of, a State or Federal VMO. Tissue samples for histopathological examination and culture shall be collected and submitted to the National Veterinary Services Laboratories, Ames, Iowa, irrespective of whether suspicious tuberculous lesions are found. In the absence of gross lesions, the VMO will submit pooled tissue samples including portions of the following lymph nodes: mandibular, retropharyngeal, parotid, mediastinal (middle and caudal), tracheobronchial (right and left), and hepatic. Mesenteric lymph nodes should be collected and bottled separately and identified as such.

Cervid herds with tuberculosis suspects should receive a complete herd test of all adult animals. If all cervical test SUSPECT deer are found negative on CCT (and BTB if used) or are found free of tuberculosis lesions at necropsy, including negative histopathology and culture, the herd may be relieved of all further restrictions.

If histopathology compatible for mycobacteriosis is reported in tissues from known tuberculosis exposed animals or if M. bovis is isolated from any animal, the herd shall be classified as bovine tuberculosis INFECTED. Positive histopathology, in the absence of M. bovis isolation, will be evaluated on a herd-by-herd basis.

When animals are classified as POSITIVE to the CCT test, and/or the BTB, the disease status of the herd must be evaluated by a tuberculosis epidemiologist. The final herd disease status will be determined based on necropsies, herd history, additional herd tests, and other diagnostic procedures as needed.

Herds in which M. bovis infection is confirmed should be retested only with the double strength cervical test (DSCT) using 0.2 ml. of USDA, PPD Bovis. All animals showing a response to the 0.2 ml. cervical injection shall be classified as POSITIVE.

The BTB may be used as an ancillary test in infected herds, but as stipulated earlier with regard to interpretation and animal classification, under no circumstances should the BTB be applied without the appropriate skin test nor will any negative BTB override a positive skin test. If elected by the owners, the BTB should be conducted on all animals in retests of infected herds. All expenses incurred in BTB testing will be borne by the owner.

The BTB test is presently being evaluated in Cervidae in North America by the Animal and Plant Health Inspection Service in collaboration with Agriculture Canada. The role of the BTB in the cervid testing procedure, if any, will depend upon this evaluation and its acceptance by the United States Animal Health Association. Following this determination, the testing standards for Cervidae will be finalized in a Veterinary Services Division Memorandum.

In all cases of Cervidae investigated for tuberculosis, the herd quarantine, testing, and followup procedures are the responsibility of the State animal health official.

Accredited veterinarians in private practice may be approved to conduct the SSCT. The accredited veterinarian must be

accompanied by a VMO, State or Federal, who is approved to conduct the CCT. When the trainee has demonstrated proper injection and palpation techniques, and fully understands interpretation and reporting procedures, he/she may be certified as trained. Upon concurrence, the chief State animal health official will record the name on a list of veterinarians approved to conduct the SSCT in Cervidae. It is recommended that States hold periodic tuberculosis workshops for training groups of accredited veterinarians in the disease, the program, and testing procedures.

/s/

Billy G. Johnson
Acting Deputy Administrator
Veterinary Services